User Manual

Product Features

1. 2.4-inch LTPS TFT LCD screen
2. 4X digital zoom
3. Video format: MJPEG (AVI)
4. Built-in Microphone & speaker
5. Filming while charging
6. Supports 180-degree image rotation
7. Supports high capacity SD (SCHC) memory card
8. Supports TV-OUT
9. Infrared video recording
10. HDMI video output (optional)

The number of shots & time of video recording:

Micro SD Card	1280*720 (720P)	848*480 (D1)	640*480 (640)	1280*1024 (1.3M)	1600*1200 (2M)	2048*1536 (3M)	2592*1944 (5M)
16G	240 min	240 min	260 min	12160(pcs)	11520	10960(pcs)	9440(pcs)
8G	120 min	120 min	140 min	6080(pcs)	5760	5530(pcs)	4720(pcs)
4G	60 min	60 min	80 min	3040(pcs)	2880	2760(pcs)	2360(pcs)
2G	30 min	30 min	50 min	1520(pcs)	1440	1380(pcs)	1180(pcs)
1G	15 min	15 min	30 min	760(pcs)	720	690(pcs)	590(pcs)

The number of shots that can be taken will vary depending on device settings, the subject and the memory card used.

Operation Instructions

Switching modes

1) Press the "ON/OFF" button to turn on the device
2) If the MODE is at video recording while starting it, it will directly go to the mode of video recording. Press the "OK" button to begin recording
   Press the "OK" button again to pause the recording and save files automatically.
3) Press the "MODE" button to select the mode among photo, audio recording, playback, and filming.
4) Press the "ON/OFF" button and hold 3 second to shut down the device when it is in the pause state.

Function Keys

Video recording / Photo / Playback

"ON/OFF"   to turn on or turn off the device

"OK"   to confirm the mode you select

"UP"   go up, or   1/2/3/4 x digital zoom in

"DOWN"   go down, or   4/3/2/1 x digital zoom out

"MODE"   mode switching among PHOTO/ VIDEO RECORDING/ RECORD/PLAYBACK

"MANU"

"Reset "

Manu Setting

Video / System Setting

Power on. Press "MANU" to enter menu setting when it is in video recording mode. Then choose the Video Setting / System Setting, and press "OK" button to confirm.

1. Video format : 1280*720 /848*480 /640*480 for option
2. Video time stamp: with / without
3. Motion detection: On/Off. The device will start video recording automatically while there is an object moving. Two minutes per section. The device standby in motion detection status when there is no object moving in two minutes, and re-start when object moving.
4. Cycle shooting: turn on / turn off
5. Cycle shooting time: the saving time of each section: 2 minutes/ 5 minutes / 10 minutes
6. Sound： Turn on/ off to select the sound
7. Power off delay：Delay for 2 minutes, 5 minutes or 10 minutes.

After selection, click "OK" button to confirm, setting completed. Then click "MANU" to exit.

Photos Setting

Power on; Press "MODE" button to enter photos mode. Choose "MENU" to enter the menu setting mode. Then press "DODE" to select:

1.Photos size：2592x1944 / 2048x1536 / 1600x1200 / 1280x1024,

2. Photos quality：Very Good / Good/ Normal

3. Photos mode：Turn Off/ 2S autodyne/10S autodyne/ Continuous

4. Exposure：Exposure luminance adjustment;

5. Date stamp：Turn Off / Date/ Time

After selection, click "OK" to confirm, setting completed. Then click "MANU" to exit.

Playback Setting

Power on; Twice-press "MODE" button to enter the audio recording mode, and

three-press to playback mode. Select "MENU" button to enter the menu setting mode. Then press "MODE" to select:

1. File locking: Lock / Unlock single / Lock all / Unlock all.
2. File deletion: Delete single / Delete all
3. Slideshow: Start / 2S intervals / cycle /yes
4. Special-effects: Black and White, Old Ways, Negative, Red, Green, Blue, Threshold, Sunset, Warm Color, Cold Color, Contrast.
5. Rotation: Rotation, Save, Back;
6. Voice Memo: Add, Delete;
7. Setting as Theme Power Up Image: Yes / No

After selection, press "OK" to confirm, setting completed. Then press "MANU" to exit.

System Setting

Power on; Press "MANU" to enter menu setting when it is in video recording mode. Then choose the System Setting by "MODE" button, and press "OK" to confirm.

1. Sound Setting:
    Shutter Sound: Turn On / Turn Off.
    Power On Sound: Three sounds for selection, Or no sound.
    Keypad tone: Turn On / Off.
    Volume: 0、1、2、3，" 0" is silence
2. Power Frequency: 50HZ, 60HZ
3. Auto Power Off：1 MIN， 3 MINS，5MINS
4. Screensaver: Turn Off, 10 Seconds, 20 Seconds, 30 Seconds
5. Date and Time Setting: Month/Day/Year   Hour/Minute
6. Language: English, Chinese (Simplified), Chinese (Traditional), Spanish, French, Portuguese, German. Japanese, Russian
7. TV Systems：NISC/PAL
8. Theme Power Up Image：Turn Off, System, Custom
9. Formatting：Yes/ No
10. Reset to defaults: Yes/ No
11. Version Information：It shows the software information.

Press "DOWN/UP" button to select, and press "OK" to confirm. Press "MANU" to exit after setting completed. Setting works after restart the device.

5. Operation

● **Get started and loop shooting**
1. Press the "ON/OFF" button to enter into video recording mode.
    A red camera icon would be displayed on the upper left corner.
2. Press the "ok" button to start video recording
    Loop recording: During recording, the device will save each video file in every 5 minutes automatically. When the SD card is full, the device will delete the first video file automatically.

The Infrared video recording function: It would be turned on automatically under low-light circumstances

Please use SDHC memory cards for 720P/30ftp video recording.

- **Shooting while charging**
  1. Connect the device to a power adapter or car charger.
  2. Press the "ON/OFF" button to enter into loop recording mode.
  3. Press the "OK" button to pause.

  Notes:
  - i. The function above cannot be done when you connect the device to PCs.
  - ii. The device would be turned on and begin video recording at the same time when your car is started. It would save video files automatically and be switched off 5 minutes after a car is stopped

- **Photo Mode**
  1. Press the "MODE" button to choose the photo mode. The upper left corner of screen will display " photos" icon.
  2. P ress " OK" button to take photos
  3. Self timer and other functions:
     - Press the "MENU" button in the photo mode
     - Press the "DOWN/UP" button to select self timer
     - Press OK

Follow the same steps as above to change the settings of the photo quality, metering mode, flash, exposure settings. Press the "MENU" button to exit.

- **Audio Recording Mode**
  1. Press "OK" button to get started.
  2. Press the "OK" button again in the audio recording state to stop recording and save the audio file.
  3. Press the "DOWN" button to pause or begin recording again.

- **Playback Mode**
  1. Press the "Mode" button three times to enter into playback mode. The upper left corner of screen will display " Playing"
  2. Press the " DOWN/UP" button to choose the files
  3. Press the "OK" button to playback the files.
  4. Press the "DOWN" button to stop or start again.

  Deleting

1) Press the "MENU" button in the playback mode (playing photo/video)
2) Press the "DOWN/UP" button to select the files
3) Press the "OK" button to delete files

Slide shows/ Special effects/ Rotation/ Set boot screen

Follow the same steps as above to change the settings of slide shows, special effects, rotation, set boot screen.

● PC Camera Mode

Easy connection with PCs/Laptops, no driver needed
1. Connect the device to a computer via USB.
2. Press the "DOWN/UP" button to choose the mode

Three modes:

- MSDC：It is a computer interface between a computer and a digital camera which shows the digital camera as a removable disk drive attached to the computer.
- PC Cam: A webcam is a video camera which feeds its images in real time to a computer or computer network via USB.
- Recording mode: Press the "OK" button to start video recording.

● HD TV-OUT

Use the included HDMI cable to connect the device to a HD TV.

● Specifications：

Sensor	COMS
Lens	Wide-angle lens 120°
Focal Range	12cm ~ infinity
Display	2.0-inch LTPS TFT LCD
AV-OUT	TV synthetic signals: NTSC
Photo	1.3M,3M,5M,8M
Video Format	AVI
Video	1280*720(30 fps/S);720*480(30 fps/S)；640*480(30 fps/S)
Zoom	4X digital zoom
Audio	External: SDHC SD card(max :32G,SDHC card)
Shutter	Electronic shutter
Shutter speed	1/2~1/1000 s
White Balance	Auto/Sunny/Cloudy
LED light	Auto/Open/Close
Interface	USB2.0 / AV OUT
Battery	600mAh
USB	USB2.0 high speed

Size/Weight	119*55*13.2mm
Working temperature / humidity	0~40℃ / 10%~80%

● Troubleshooting

a) Cannot shoot?

Confirm the memory card is inserted ,and there is enough free space on the memory card to shoot

Change the resolution of photos and videos

b) What if the images doesn't properly display on the TV

Use the included AV cable to connect the device to a TV. Be sure to fully insert the AV cable plug into the TV's video terminal.

c) Image is blurred?

Use a clean, soft lens-cleaning cloth to gently wipe the lens.

D) If the device stops functioning, use the reset button to reset the device.